VIRGINIA ROANOKE RIVER BASIN ADVISORY COMMITTEE MEETING MINUTES
October 3, 2003
VT Kentland Farms

Attendance: All VRRBAC members except Sen. Hawkins, Sen. Ruff, Del. Byron, Del. Hurt, Del. Thomas, Del. Wright, Bob Conner, Watt Foster, Haywood Hamlet, and Representative Virgil Goode; DEQ: Greg Anderson, Scott Haley, and Jason Hill; DCR: Tim Ott and Dean Gall.

Call to Order:

Chairman Feild called the meeting to order.

Recognition of Visitors:

Chairman Feild recognized the visitors and guests including Dave Rundgren, New River Valley PDC, Chris Barbour, Skyline SWCD, Tom Cain, Impact, Bonnie Johnson, Franklin Co. Assistant Administrator, Shannon Varner, Troutman and Sanders, Jim Whitely, Floyd County, and Dwight Paulette, Kentland Farms.

Welcome:

Dave Rundgren, New River Valley PDC, welcomed the group to the area and thanked the group for their work. He then reviewed pertinent facts about the Roanoke River area located in the planning district.

- The headwaters of the Upper Basin including the North and South Forks of the Roanoke River begin in this district and cover 162,894 acres or about 12% of Upper Basin Area.

- Notable Land Uses/Features of the Roanoke Basin area include Forest, Agricultural, a Designated Scenic Highway, a Trans America Bike Route, Blacksburg Expansion into the basin, Blacksburg Urban area defined by Census, Blacksburg/Christiansburg/Radford Metropolitan Statistical Area, Smart Highway research, and the Eastern Continental Divide.

- Land protections include traditional zoning areas, 500 acre Pedlar Hills Natural Area, Conservation Easements of 500 acres including existing easements and the T-21 project between Montgomery and Roanoke counties, and Conservancy ownership of 5,000 acres (Bottoms Creek, Falls Ridge, and other areas). The National Forest contains 12,000 acres while and the Montgomery Co. Ag & Forestry District is comprised of 19,000 acres.

- Issues facing the basin are defining low flow conditions so that better planning can be conducted, flooding, forming a swift water rescue team, development of a basin wide storm-water management plan, river access for recreation and fishing, and maintaining land use decision making at the local level. It is believed that intergovernmental cooperation can improve the latter.

- He displayed a graph of stream flow in the area after a ½ to 1-inch storm. This illustration demonstrated the heavy runoff and quick stream flow increase in the river system. This scenario is typical of the region and can impact the basin downstream.

- He extended a thanks to Mrs. Janney for representing the headwaters area on the committee and closed by inviting the Committee back for a meeting at the New River Valley Regional Center at some future date.

- Chairman Feild pointed out that the presentation laid out issues that this committee needed to consider. It also highlighted the concerns of the headwater areas that can impact the rest of the basin.

June 26, 2003 meeting minutes:

A motion was made to approve the minutes as written. The motion was seconded and passed.

Scott Haley, Virginia Department of Environmental Quality; "Animal Waste Regulations in Virginia":

Scott's presentation gave an overview of the regulations on animal waste in VA including the types of permits and the size of facilities regulated. He also touched on the new Federal CAFO rule and its impact on VA programs.

- There are basically 3 types of permits, which may be issued to farms, depending on type and size of operation, and environmental factors. These are 1) VPA General Permit, 2) VPA Individual Permit, and 3) VPDES Permit. The general permit is by far the most widely used. General permits are used to regulate operations with similar characteristics.

- One general permit is a VPA General Permit for Confined Animal Feeding Operations (300 AU's or Animal Units). An animal unit is 1000 lbs. live weight. The applicable number of animals equivalent to 300 AU's are 300 beef cattle (feeder or slaughter), 200 mature dairy cattle, 150 horses, 3000 sheep, and 750 swine (avg. wt over 55lbs.).

- Another general permit is the VPA General Permit for Poultry Waste Management (200 AU's). The equivalent amount of animals would be 11,000 turkeys and 20,000 chickens.

- The Federal regulation regarding animal waste is the NPDES - National Pollutant Discharge Elimination System Permit Regulation (40CFR Part 122 and 412). In Virginia, NPDES = VPDES. DEQ is approved to administer the program. VA has traditionally not issued VPDES permits for animal waste because of our VPA program and the 25-yr./24-hr. storm permit exemption. State programs must be at least as stringent as the Federal Program. No permit issued by a non-NPDES program will satisfy the NPDES permit requirement. If a state must amend or enact a statute, "such revisions must take place within 2 years" after final rule is in place.

- **KNOWN CHANGES:**

  - Currently a general permit in Virginia is issued for 10 years. Under the Federal Regulation for certain facilities this must be reduced to 5 years. All "Large CAFO's" defined in the regulation need to obtain a VPDES permit. In the Federal rule the C in CAFO stands for concentrated not confined. There may be operations that do not meet the Large CAFO threshold that will be defined or designated as CAFO's. If covered by a VPA permit and have a Nutrient Management Plan, it is less likely to be designated a CAFO. Approximately 150 operations will likely need to convert from VPA to VPDES permits.

  - Some threshold numbers of animals that would qualify as "Large CAFO's" are 700 dairy cattle, 1000 beef cattle, 2500 swine, 125,000 broilers, 82,000 laying hens, and 55,000 turkeys.

  - Enforcement authority rests solely with the Commonwealth at present. Under the new Federal regulation EPA will also have the authority to enforce as well as designate CAFO's. There will also be an annual reporting requirement.

  - Federal Rule was published in the Federal Register February 12, 2003. The Virginia Code is required to comply with the new Federal Regulations. Currently developing VPDES Regulation and amending VPA Regulations (Timeframe for completion = Fall 2004 / Spring 2005).

  - Confinement is defined as animals that are contained, maintained, or fed for a total of 45 days or more in a 12-month period. May be a facility or a lot where crops, vegetation, forage growth or post harvest residues are not sustained over any portion. Milking counts as confinement.

- There are two parts to an inspection. The first is a review of record keeping which helps demonstrate compliance with the nutrient management plan and other permit requirements. The second is a visual inspection to ascertain that feed and waste storage, mortality disposal, field buffers, etc. are up to standards.

- Other concerns besides manure are parlor/milk room waste water and silage runoff discharge. Also storm-water off of roofs.

- DEQ contacts are at the Roanoke Office at (540) 562-6700, the Lynchburg office at (434) 582-5120. Scott Haley may be reached at (804)698-4443 or email: tshaley@deq.state.va.us

Jason Hill, TMDL Coordinator, Virginia Department of Environmental Quality; TMDL's and Water Quality Issues Associated with Agriculture":

Jason spoke to the group about Total Maximum Daily Load (TMDL) development in Virginia and presented information about an implementation project in the Three Creeks area of the Holston River Watershed. He also spoke briefly about the DEQ monitoring programs and distinguished between point and non-point sources. Discussion included the parameters DEQ monitored for.

- A TMDL is defined as the amount of pollution that a stream can receive and still meet water quality standards. A TMDL study ID's all sources of pollution entering a stream and calculates the amount of pollutants from each source. It then calculates the reductions in pollutants by source that is needed to attain and maintain water quality standards.

- The 1972 Clean Water Act (CWA) requires water quality monitoring, periodic assessment of the data, and a listing of any impaired waters. A TMDL must be developed for any water considered impaired. The 1997 Virginia Water Quality Monitoring Information and Restoration Act (WQMIRA) also requires TMDL's for impaired waters and further requires an implementation plan.

- The steps in the TMDL Process are to 1.) Place impaired waters on 303(d) list due to water quality standards violations; 2.) Develop TMDL(s)for impaired waters (one per pollutant); 3.) Develop TMDL implementation plan; 4.) Implement the TMDL; 5.) Once water quality standards are achieved the waters can be removed from the 303(d) list.

- Water Quality Standards are regulations based on federal and state law that set numeric and narrative limits on pollutants. The purpose of water quality standards is the protection of six designated uses that are 1.) Primary contact recreation; 2.) Aquatic life; 3.) Fishing; 4.) Shellfishing; 5.) Drinking water; 6.) Wildlife.

- Impaired waters in Virginia are waters where a standard is violated during an assessment period more than 10% of the time. The assessment period is normally 5 years. The current assessment looks at data collected January 1998 through December 2002. This assessment is due to EPA on April1, 2004.

- Virginia is working under a consent decree to develop 644 TMDL's by May 1, 2010.

- The top causes of impairments in the State include 1.) Pathogen indicators (In VA fecal coliform has been used until recently and is now being replaced with E. Coli in freshwater and enterococci in saltwater.); 2.) Organic enrichment (low dissolved oxygen); 3.) Temperature; 4.) Aquatic Life impairment (benthic organisms).

- DEQ is the overall lead agency for the process and public participation. It is responsible for monitoring and assessment of water quality, developing the TMDL, and getting EPA approval. DCR assists in the development of non-point source TMDL's, development of Implementation plans to meet TMDL's, and provide cost share funding.

Jason then presented some slides about an implementation project that is well underway in the Three Creeks area of the Holston River Watershed. Bill Moss and Shauna Russel of the Holston River Soil and Water Conservation District provided this information. Much progress has been made in the area and several before/after photographs demonstrated the progress. Much of the progress is attributed to landowners convincing other landowners. It should be noted that these are voluntary actions. Pictures of some BMP's were shown and funding source information was discussed. Also Biological Source Tracking (BST) was

reviewed. This is a method used to determine the source of the bacteria. The method distinguishes between wildlife, human, pet, and livestock sources. This is critical in deciding what corrective means must be implemented in an area. The highlights of the presentation are below.

- Three Creeks Watershed contains 22,145 acres. There are 61 miles of streams, 39 miles which have livestock access. There are 284 Farm Tracts in watershed greater than 5 acres that total 15,689 acres. Only 162 tracts actually have perennial surface water. The average farm size is 55 acres.

- In order to achieve Fecal Coliform reductions and meet State water quality standards the implementation plan drafted July 2001 required the following measures be implemented by the stakeholders in the impaired watersheds. 1.) Most/all livestock must be excluded from streams with in all impairments; 2.) Most/all failing septic systems and straight pipes must be identified and corrected; 3.) A 10% reduction of Fecal Coliform Bacteria in runoff from improved pasture/hayfields in the Hutton Creek watershed.

- Holston River SWCD role was to encourage voluntary participation in agricultural and residential TMDL programs, work with landowners to reduce fecal coliform loads by assisting with the development of conservation plans, educate landowners on the benefits of installing conservation practices, and track progress of TMDL implementation plan.

- Holston River S.W.C.D signed a grant agreement with the Department Conservation and Recreation to provide technical and educational assistance for the project starting 10/01/01 through 6/30/03. This is one of three pilot projects in the State of Virginia. Approximately $500,000 total funding is from 319 EPA Funds. 2 full time employees were hired by the HRSWCD, one to handle agricultural and one for residential implementation.

- Available Cost-Share funds included $230,000- 319 EPA funds for agricultural implementation, $90,000-319 EPA funds for residential controls, Unlimited-Conservation Reserve Enhancement Program USDA, and $15,000 TVA funds for residential and/or agricultural projects.

- Agricultural conservation practices eligible for Cost-Share funds were development of alternative water source (i.e. well, spring development), fencing (along stream or interior), water troughs and reservoirs, pipelines, harden stream crossing/ limited access points, and forested riparian buffers.

- 319 Funding requires that fence be set 25 feet from top of stream bank, practices must be in place and operational for 10 year life span, 75% cost-share based on actual cost, 25% Virginia income tax credit on out of pocket expenses, and the program encourages installation of rotational grazing systems to improve pastureland on the entire farm.

- Residential conservation practices eligible for cost-share funding included septic tank pump outs, connections to public sewer, septic tank repairs, replacing straight pipes and failing septic systems, and alternative on-site waste treatment systems.

- The 319 program requires for residential practices 1.) 50% to 75% cost share rates, based upon income. Applicant's may also qualify for extra funding and receive 100% cost share. 2.) Practices must have a 10 year life span. 3.) Homes must be within 300 feet of a stream, perennial or intermittent, sinkhole or spring. 4.) The Residential TMDL Committee evaluates projects, ranks applications and submits recommendations to the HRSWCD Board for final approval. This committee is made up of a DCR, Environmental Health Department, and a T.V.A. representative.

- Educational activities have included newspaper and TV articles in addition to presentations to civic groups. Most outreach has been by direct contact with landowners to present information about the TMDL study and cost-share programs. To date 140 agricultural landowners have been contacted representing 10,450 acres in the watersheds. Fact-sheets were developed and direct mailings made to every agricultural landowner in the watershed in order to encourage participation. Displays and informational brochures were created for agricultural tours, local businesses within the watersheds and

the USDA Service Center Office. An Educational demonstration on "Alternative On-Site Waste Treatment Systems" has been developed.

- A question was asked if a County could request a TMDL be conducted. Before a TMDL can be developed data must be collected. So monitoring can be requested and if the data indicates the need for a TMDL it will be done. Citizen monitoring groups can even request monitoring.

- A discussion of bio-solids ensued and whether or not a permit was required. The answer was yes, either through VDH or DEQ depending upon the source of the material. It was pointed out that bio-solids could be very beneficial if applied correctly. Are NMP's required for bio-solids? Currently the Bio-solids Use Regulations (BUR) require NMP's whenever a CAFO is involved or DEQ has a NMP requirement. However, SB 1088 that just went into effect on 1July 2003 requires VDH to revise our rules (which we are in process of doing) to require a NMP for any farm that receives greater than a 50% rate of Plant Available Nitrogen (PAN). Most booklets that are currently being submitted to us contain a NMP. Also remember that our old rules required about 90% of the requirements of a NMP.

- There was discussion concerning the importance of the TMDL process being the same for States sharing waters and/ situations where waters entered or left one state from or to another. This may be a topic to be addressed at the Bi-State Commission level.

- Mrs. Janney made the point that the BMP's associated with watering animals helped the farmer use land not previously used because there was not an adequate water source. It is wonderful to have this program because it allows farmers to use what they have more effectively. She said that if a farmer found that a BMP worked better for him than what he currently had the rest of neighborhood is likely to sign up too. Conversely if it does not work nobody will sign up. Everyone is looking at their bottom line and providing for their families. A farmer is going to consume what he makes on that farm before he sells anything to anyone else.

- There was a lengthy discussion of ground water levels. A question was asked that if someone used a well for watering purposes would it impact the groundwater table. The answer would likely depend upon the local conditions. Agriculture was said to generally have less of an impact then urban/industrial uses of the groundwater. Reportedly, the trend has been for groundwater tables in the region to be at lower levels in recent years. It was indicated that in places farmers are going on local water systems. It was decided that this would be a good topic for a future meeting.

- It was suggested that the committee at some future date should consider taking a position on the use of BMP's.

- Scott Haley pointed out that DEQ provided low interest loans to help farmers meet their cost share portion when installing Agriculture BMP's. This is called the Virginia Agriculture BMP Loan Program. A link for information on this program follows: http://www.deq.state.va.us/cap/aghome.html

- Mrs. Janney said that she remembered her grandfather would not remove the trees from his stream banks because he recognized their value in protecting the waters. He would get angry with those who cut them down. Now we have gone full circle because we are replanting the trees. Her grandfather was right.

- Chris Barbour talked about how he worked with the farmers on a location/facility specific manner to effect BMP's under the guidelines of the various funding sources. New BMP's can be considered but must be approved by a statewide committee.

Sub-committee Reports:

- **Agricultural and Forestry:**

  - Haywood Hamlet was not present. No report.

- **River Interests:**

  -Watt Foster was not present. No report.

- **Municipal Interests and Permit Holders:**

  - John Feild indicated that John Primiano had resigned from the committee.

- **Water Committee:**

  - Chairman Feild broached the topic that the name of this sub-committee should be changed to Water/Air. A discussion of air pollution ensued and whether or not it was included in the authorizing legislation. Appears that there is credible evidence that air pollution does impact water quality. An example was given about the possible effect of fly ash from a coal-fired power plant in Clarksville and its impact on water being a local concern. There was some concern expressed about this being a very broad subject. It may be warranted to limit the area of concern to air pollution that does impact water quality. Read talked about the Clover Power Plant, Halifax County, and the delay in its construction due to a discussion of low sulfur coal use and the failure of the design to include scrubber technology. The prevailing winds were from Halifax County to Charlotte County and the citizens in the latter were very concerned. The committee agreed to table the idea for now and discuss at the next meeting.

- **Lakes Interest Committee:**

  - Robert Conner was absent. John reported the 2 sub-committee meetings at Lake Gaston and Kerr Reservoir. The purpose of the meetings was to solicit issues of concern from the various Lake communities. A listing of the concerns is as follows: 1.) No inter-basin transfer of water; 2.) Any withdrawals should be returned to the lake; 3.) Want Lake levels to remain at relatively constant level +/- ½ foot (Lake Gaston specified at 199.5 +/- ½ foot; 4.) Hydrilla and other noxious weed control. VA should re-establish its $200000 funding for this purpose. NC still provides funding; 5.) Gas from spills, gas and sewage from boats, cows as bacteria source, and raw sewage. 6.) E-coli levels for swimming purposes; 7.) Other evasive species such as Zebra Mussels; 8.) Want planned economic development; 9.) Want environmental friendly industry; 10.) Want more game wardens and police protection especially during peak periods; 11.) Improved and more protected fishing; and 12.) Regulation commonality between the states.

  - Charles Poindexter mentioned that he expected similar concerns when he conducted a meeting at the Smith Mt. and Leesville Lake area. Local people there were also interested in water levels and were interested in seeing some type of formula to control basin-wide levels incorporated into the upcoming new FERC license. Boats “privy’s” were also an issue and SML is now actually a no discharge zone. However there is a shortage of personnel to enforce the law. The meeting for this area has since been set for 7 p.m., December 3, 2003, at the Tri-county Lake Administration Commission Office near Moneta.

  - Charles also informed the group of the AEP Shoreline Management Plan process and the unfavorable sentiment of the localities about it. The three counties surrounding the lake had initiated meetings to discuss a common way to do business in the lake area a couple years ago. AEP became involved and started developing this Shoreline Management Plan. A couple of public meetings were held and a committee was formed which allowed for public participation. However, a consultant hired by AEP drafted the plan. There was a final committee meeting where many changes agreed to. Two days later the consultant submitted the plan to FERC and there was no public acceptance of the final document. FERC provided 30-day notice for public comment. Needless to say the local community was very upset. Congressional leaders intervened to have the comment period extended. This plan proposed detailed requirements on such things as vegetative buffers and types of trees to use even around marinas where riprap would be the preferred erosion

prevention mechanism. The way the plan is written there would be no guarantee that during a property transfer that the dock would go to the buyer. This would impact property values.

Other Business:

- Greg Anderson indicated that a template for setting up the planned VRRBAC web-site on the DEQ System had been received. He will be getting material to Jason Hill to put on the site. It is hoped the site can be operational by the end of the year.

- Greg Anderson reported that Kathy Frahm, DEQ Policy Division, had indicated that an appointment of a VRRBAC member would be made to the John H. Kerr 216 Sponsors Advisory Committee. The only question is whether the Secretary of Natural Resources Office or the ACOE will make the appointment.

- Greg reported that NC had made a few appointments to their Advisory Committee. A.B. Swindell of Nashville, Clark Jenkins of Tarboro, and Robert Holloman of Ahoskie.

- Mike McEvoy indicated the Water Supply Planning TAC report draft is out. There is apparently a lot of discussion as to who is to pay for the associated expenses. More redrafting is expected. Inter-basin transfer has been a hot topic in the discussions.

Future Meetings:

A motion was made, seconded and passed that the next meeting will be held in Richmond during the General Assembly session at a time which a meeting room could be obtained. The date and location has now been arranged for 10 a.m. on January 21, 2004, at the Library of Virginia Conference Room A.

Adjournment:

The business portion of the meeting was adjourned and a tour of the farm and some particular features ensued.

Dwight Paulette, College Farm Coordinator, VT Kentland Farm; "Overview of Farm Operation and Environmental Practices":

Dwight discussed the farm operation and described the research that is conducted at the facility. He also highlighted various environmental practices conducted at the farm. The vision for the College Farm Operation is for it to become a truly outstanding university educational facility. The farm strives to meet the needs of the College of Agriculture and Life Sciences faculty as they discover new, science-based agricultural knowledge through research programs, relay that information to university students, and disseminate it across the Commonwealth, the nation, and throughout the world. The farm operation is managed with the above in mind, but functions cost-effectively, with care toward providing responsible management of its natural resources. The College of Agriculture and Life Sciences is expected to be a responsible steward of its land, resources, and the environment.

Dean Gall, Environmental Specialist, Sr., Virginia Department of Conservation and Recreation; "Nutrient Management":

Dean discussed the various elements of a nutrient management plan and emphasized the importance of working with the farmer to meet site/equipment/ weather specific/other conditions to make the plan effective. It is very important that the farmer be in agreement with the approach and understands the benefits. They develop site-specific nutrient management plans with cooperating farmers, assist farmers with manure testing for nutrient levels, calibrate nutrient application equipment, and coordinate soil nitrate testing in agricultural crop fields.

Christopher Barbour, Conservation Specialist, Skyline Soil and Water Conservation District; Best Management Practices (BMP's) and Funding Programs:

Chris led a tour of various Best Management Practices (BMP's) at the farm and discussed various programs that provided money to develop these BMP's. A pamphlet discussing these funding sources was included in the member packets. BMP's observed included off stream waters, solar pump driven gravity watering system, a stream crossing, fencing options, rotational grazing, grass options, stream buffers, manure storage, and no-till crops.